



# भारत का राजपत्र

## The Gazette of India

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY

सं. 3]

नई दिल्ली, शनिवार, जनवरी 16, 1993 (पौष 26, 1914)

No. 3]

NEW DELHI, SATURDAY, JANUARY 16, 1993 (PAUSA 26, 1914)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

### भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

#### THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 16th January 1993

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The States of Gujarat, Maharashtra and Madhya Pradesh and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,  
Unit No. 401 to 405, III Floor,  
Municipal Market Building,  
Saraswati Marg, Karol Bagh,  
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,  
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Madras-600 002.

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Telegraphic address "PATENTOFIS".

Patent Office (Head Office),  
"NIZAM PALACE", 2nd M.S.O. Building,  
5th, 6th and 7th Floor,  
234/4, Acharya Jagadish Bose Road,  
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS"

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

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पेटेंट कार्यालय

एकस्व तथा अभिकल्प

कलकत्ता, दिनांक 16 जनवरी 1993

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार  
तथा बम्बई, दिल्ली एवं मद्रास से इसके शासा कार्यालय हैं, जिनके  
प्रादीपिक अधिकार गोप्ता के आधार पर निम्न रूप में प्रदर्शित  
हैं :—

पेटेंट कार्यालय शाखा, टोडी इस्टेंट,  
तीसरा तल, लोअर परले, (पश्चिम),  
बम्बई-400013।

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य  
क्षेत्र एवं संघ शासित क्षेत्र गोजा, दमन तथा  
दीव एवं दादरा और नागर हवेली।

तार पता—“पेटेंटोफस”

पेटेंट कार्यालय शाखा,  
एक सं. 401 से 405, तीसरा तल,  
नारायालिका बाजार भवन,  
सरसदती मार्ग, करोल बाग,  
नई दिल्ली-110005।

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर,  
पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों  
एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—“पेटेंटोफिक”

पेटेंट कार्यालय शाखा,

61, वालाजाह रोड,  
मद्रास-600002।

जनध् प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य  
क्षेत्र इवं संघ शासित क्षेत्र पश्चिमी, उक्तहृषीप,  
मिसिकाय तथा अमीरिदीचि इवीप।

उत्तर पता—“पेटेंटोफस”

पेटेंट कार्यालय (श्रधान कार्यालय)

निजाम ईस्लेस, दिवतीय बहुतलीय कार्यालय,  
5, 6 तथा 7वां तल,  
/4, आचार्य जगदीश बोस रोड,  
क्ला-700020।

का अवशेष क्षेत्र

पता—“पेटेंट्स”

टिंटे अधिनियम, 1970 या पेटेंट नियम, 1972 में अपे-  
सभी आवेदन पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट  
लिय के केवल उपर्युक्त कार्यालय में ही प्राप्त किए जाएंगे।

गूल्क :—शुल्कों की अदायगी या तो नकद की जाएगी अथवा  
कृत कार्यालय में नियंत्रक को भुगतान योग्य धनादेश अथवा  
आदेश या जहां उपर्युक्त कार्यालय अवस्थित है; उस स्थान  
अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्रॉफ्ट  
अथवा चैक द्वारा की जा सकती है।

#### THE PATENT OFFICE

Calcutta, the 16th January 1993

APPLICATION FOR PATENTS FILED AT THE HEAD  
OFFICE 234/4, ACHARYA JAGADISH BOSE ROAD,  
CALCUTTA-20.

The dated shown in the crescent branch are the dates  
claimed under section 135, of the Patents Act, 1970.

The 27th November 1992

863/Cal/92. The University of melbourne. Binocular bent-  
axis loupes. (Convention No. PK 9740 dated  
28-11-91; Australia).

The 30th November 1992

864/Cal/92. E. I. DU Pont De Nemours and Company.  
Fine Denier Staple Fibers.

The 1st December 1992

865/Cal/92. E. I. Du Pont De Nemours and Company.  
Filash-Spinning of Polymeric plexifilaments.  
(Divided out of No. 715/Cal/89; antedated to  
31-08-1989)

866/Cal/92. Shri Debashish Sarkar, and Indian National  
Proprietor, M/S. Diesel Cooking oven Co. Im-  
provements in or relating to Atomazing Nozzle for  
fuel oil.

The 3rd December 1992

867/Cal/92. Koninklijke Enballage Industries Van Leef B.V.  
Drum with drum closure.

868/Cal/92. Siemens Aktiengesellschaft. Contact point having  
a Contact-Silver Contact Facing, And A Method  
of producing it.

869/Cal/92. Hans Oetiker Ag Maschinen-und-Apparatefabrik  
Oberdorfstrasse. Self tightening clamp made from  
spring steel band material.

870/Cal/92. Michael B Riley. Internal combustion engine  
with variable combustion chamber and increased  
expansion cycle.

The 4th December 1992

871/Cal/92. N. V. Philips' Gloeilampenfabrieken. Flat-panel  
type picture display device with electron transpor-  
ducts and a double selection structure.

872/Cal/92. N. V. Philips' Gloeilampenfabrieken. Picture  
display device comprising a flat-panel type display  
unit.

873/Cal/92. Indian Jute Industries' Research Association. Method of obtaining improved light stabilized dehaired lignocellulosic textile materials.

The 9th December 1992

874/Cal/92. Sinvent AS. Apparatus for removing of particles from the bottom of water reservoirs and other water ways.

The 9th December 1992

875/Cal/92. Erna Huemer Unistrap-verpackung. Process for metering and apparatus for carry it out.

876/Cal/92. Thomson Consumer Electronics, Inc. Vertical Deflection Arrangement for zoom and pan Features.

877/Cal/92. Immune System Limited. In vitro Antibody production. (Convention No. 9126094.3; filed on 9th December, 1991 U.K.).

878/Cal/92. Sumitomo Chemical Company, Limited. Bisazo compounds and method for dyeing or printing fiber materials using the same.

879/Cal/92. Hoechst Aktiengesellschaft. Water-soluble fiber-reactive dyestuffs, processes for their preparation and their use.

The 14th December 1992

880/Cal/92. Impact Telemedia, Inc. Promotional game method and apparatus therefor.

881/Cal/92. Rush-presbyterian-st. Luke's medical centre. Method and compositions for reducing multi-drug resistance.

882/Cal/92. Eaton Corporation. Touch point identification for automatic clutch controller.

883/Cal/92. E. I. Du Pont De Nemours & Co. Improved process for flash spinning plexi-filamentary film fibre strands. (Divided out of No. 714/Cal/89 Antidated to 31-8-89).

884/Cal/89. Ping-Shin Wang. Circular Knitting Machine Striper Control System.

885/Cal/92. Re-Mark-It Limited. A label.

886/Cal/92. United Artists Theatre Circuit, Inc. Motion picture system for economical replication, consolidation, duplication and exhibition of wide screen formats.

887/Cal/92. Environmental protection group Ltd. Device for separating multiple-component fluids.

888/Cal/92. 1. Cheil Foods & Chemicals, Inc. and 2. Samsung Co. Ltd., Novel 10-hydroxy Pheophytina.

889/Cal/92. Ermanno Pacini. Diamond frame for sawing blocks of granite or other stone material.

890/Cal/92. Himont incorporated. Process for the preparation of stabilized polyolefins and products obtained therefrom.

The 15th December 1992

891/Cal/92. Santanu Roy. A novel apparatus for generating thermal power and a process for producing gaseous fuels therewith.

892/Cal/92. Amsted Industries Incorporated. Center sill with short yoke member.

893/Cal/92. United States Environmental protection Agency. Refrigerant Compositions and processes for using same.

894/Cal/94. Hollandse Signaalapparaten B. V. Radar apparatus provided with a coherent clutter map.

895/Cal/92. Krupp Industrietechnik Gesellschaft Mit beschränkter Haftung. Ball race slewing gear.

896/Cal/92. Technological Resources Pty Limited. Regeneration of hydrochloric acid.

897/Cal/92. Reckitt & Colman Inc. Method for attracting insects.

898/Cal/92. Laboratori Guidotti Spa. Stable salts of (x)-(+)-(1S, 2R)-2-[N-(2-Hydroxylamino-2-Oxoethyl)-N-Methyl-Amino] Carbonyl Cyclohexane-1-Carboxylic acid process for their preparation and pharmaceutical compositions containing them.

The 16th December 1992

899/Cal/92. General Electric Company. Stator frame for dynamoelectric machine and method for making same.

900/Cal/92. Tatsuo Ono. Support system.

**APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002**

The 9th November 1992

674/Mas/92. Recticel Holding Noord Bv and Brian James Blackwell. Method and device for the continuous manufacture of slabstock polyurethane foam within a predetermined pressure range.

675/Mas/92. Caterpillar Inc. Linear position sensor using a coaxial resonant cavity.

The 11th November 1992

676/Mas/92. Avarampalayam Gopalswamyndu Govindarajulu. Improvements in or relating to travelling cleaners for use on industrial machineries, such as textile and jute machineries. (Divisional to Patent Application No. 566/Mas/92).

677/Mas/92. Eduard Kusters Maschinenfabrik GmbH & Co. KG. A widening device.

678/Mas/92. Minnesota Mining and Manufacturing Company. A process for preparing fluorochemical oxazolidinone compounds. (Divisional to Patent Application No. 344/Mas/91).

679/Mas/92. Huwood International Limited. Bearing Alarm. (November 11, 1991; United Kingdom).

680/Mas/92. F. L. Smith & Co. A/S. Method for manufacturing cement.

681/Mas/92. John Nicholas Angyropoulos; Brian Terry Keen; Donald Charles Best and Joseph Victor Koleske. Substituted 1, 5-pentanediols and processes for the preparation thereof.

682/Mas/92. Monsanto Company. Method for improving the performance of VPO catalysts.

The 12th November 1992

683/Mas/92. Krishna Prasad. Electronic intelligent access control system.

684/Mas/92. Electrovert Ltd. Gas shrouded wave soldering.

The 13th November 1992

685/Mas/92. Chemische Fabrik Grunau GmbH. A fire-proofing compound and its use.

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15 of such opposition. The written statement or opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kisan Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

## स्वीकृत सम्पूर्ण विनिर्देश

एतदशारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में निकोटी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम एंसी अवधि जो उक्त 4 महीने की अवधि को समाप्त के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र 14 पर आवंटित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकस्व को एंसी विरोध की सूचना विहित प्रपत्र 15 पर दे सकते हैं। विरोध संबंधी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथा विहित इसकी तिथि के एक महीने के भीतर ही फ़ाइल किए जाने चाहिए।

“प्रत्येक विनिर्देश के संबंध में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अंतर-राष्ट्रीय वर्गीकरण के अनुरूप है।”

नीचे सूचीगत विनिर्देशों की सीमित संख्यक मूल्यित प्रतियां, भारत सरकार बूक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय होते यथा समय उपलब्ध होंगी। प्रत्येक विनिर्देश का मूल्य 2/- रु. है। (अतिरिक्त डाक खर्च)। मूल्यित विनिर्देश की आपूर्ति होते मांग-पत्र के साथ निम्नलिखित सूची में यथा प्रवर्णित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (विच्च आरेस्टों) की फोटो प्रतियां यदि कोई हो, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार जिसे उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरांत उसकी

अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेस्ट कार्यालयों को जोड़कर उसे 4 से गुणा करके; (क्रपोंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु. है) फोटो लिप्यान्तरण प्रभार का पर्याप्तता किया जा सकता है।

Ind. Cl. : 140 A2. Gr. [XI (2)]

171811

Int. Cl. : C 10 M—101/00, 157/08, 169/04, 1/44

## A PROCESS FOR THE PREPARATION OF A LUBRICATING COMPOSITION

Applicants : INDIAN OIL CORPORATION LIMITED 254-C, DR. ANNIE BASANT ROAD, BOMBAY-400 025, MAHARASHTRA, INDIA AN INDIAN COMPANY.

Inventors : 1. ELTEPU SAYNNA, 2. KANTA PRASAD NAITHANI, 3. VIJAY PRABHAKAR DESHMUKH, 4. SOMPRakash SRIVASTAVA, 5. AKHILESH KUMAR BHATNAGAR.

Application No. 221/Bom/1989 filed on 8th August, 1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patents Office Branch, Bombay-13.

## 8 Claims

A process for the preparation of a lubricating composition which comprises subjecting the base lubricating oil to heating at a temperature of 100°C followed by adding 2 to 30% by weight of a polymer, as herein described, to the heated oil under stirring, followed by raising the temperature of the mix to 150°C with constant stirring, thereafter adding 10 to 30% weight of mineral wax, as herein described, maintaining a constant stirring, whereafter heating was discontinued and the temperature of the mix was allowed to come down to 90°C under stirring, followed by adding 1 to 10% by weight of rust inhibitor, as herein described, 0.05 to 10% by weight of anti-wear additive as herein described, as herein described, maintaining the mixing until homogeneity is obtained and allowing the temperature of the mix to cool down to 70°C, whereafter the lubricating composition so obtained is recovered under normal conditions.

Compl. Specn. 12 pages.

Drgs. Nil.

Ind. Cl. : 123 I (4)

171812

Int. Cl. : A 01N—25/04

## PLANT GROWTH PROMOTING COMPOSITIONS IN AQUEOUS EMULSION FORM.

Applicants : HINDUSTAN LEVER LTD., HINDUSTAN LEVER HOUSE, 165/166 BACKBAY RECLAMATION, BOMBAY 400 020, MAHARASHTRA, INDIA.

Inventors : (1) DR. SRIDHARA BHASKARAN (2) DR. PANKAJ PRADYUMNARAI VAISHANAV.

Application No. 47/Bom/1990 filed on 26-2-1990 Cognate to 187/Bom/1990 filed on 20-7-1990.

Complete after provisional left on 20-5-1991.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

## 17 Claims

A plant growth promoting composition in aqueous emulsion form, containing as active ingredients :

- at least one plant growth promoter selected from the group consisting of plant wax isolates such as herein described, plant fatty acid distillation residue isolates such as herein described, and  $C_{12}$  to  $C_{35}$  fatty alcohols, and mixtures thereof; and

(b) at least one plant metabolic activator selected from the group consisting of nucleotide derivatives and functionally related compounds such as herein described, tetracyclic diterpenoid acidic derivatives and relates compounds such as herein described, indole derivatives and functionally related compounds, such as herein described, and mixtures thereof.

Provn. Specn. 6 pages.

Drgs. Nil.

Compl. Specn. 22 pages.

Drgs. Nil.

Ind. Cl. : 32F<sub>2</sub> (a) IX (1)

171813

Int. Cl. : C07C—67/08.

#### A PROCESS FOR PREPARING AN ESTER.

Applicants : HINDUSTAN LEVER LTD., HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY 400 020, MAHARASHTRA, INDIA.

Inventors : (1) GEOFFREY ALAN HILLS, (2) ALADAIR ROBIN MACRAE, (3) RAMIRES ROLANDO POULINA.

Application No. 83/Bom/1990 filed on 20-4-1990.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

#### 9 Claims

A process for preparing an ester by reacting a C<sub>7</sub>-C<sub>36</sub> mono- or dicarboxylic acid and a C<sub>2</sub>-C<sub>8</sub> monoalcohol in the presence of a lipase catalyst characterized in that water of reaction is removed by azeotropic distillation of a mixture of C<sub>2</sub>-C<sub>8</sub> monoalcohol and water having a minimum in the boiling point curve in the absence of an aromatic solvent.

Compl. Specn. 14 pages.

Drgs. Nil.

Ind. Cl. : 185 E, Gr. [XVIII]

171814

Int. Cl. : A 23 F—3/16

#### PROCESS OF PREPARING A TEA PRODUCT.

Applicant : HINDUSTAN LEVER LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF INDIA HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventors : 1. BART BARMENTLO, 2. WILLEM JACOBUS BEL, 3. BRUIN HOOGSTAD, 4. SIDNEY PENDLINGTON & 5. NIGEL KENNETH HARRY SLATER.

Application No. 88/Bom/1990 filed on 24th April, 1990

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

#### 16 Claims

A process for preparing a tea extract, which comprises :

- (a) preparing a tea extract,
- (b) adjusting the temperature of the extract to a value of from 20°C to 80°C,
- (c) treating the extract with tannase while maintaining said temperature for a time sufficient to solubilize a substantial portion of the tea cream therein at a pH value between 4.0 and 7.0,
- (d) subjecting the extract to an ultrafiltration (UF) treatment at a temperature of from 2°C to 90°C using a membrane having an average molecular weight exclusion point of at least 5,000 Daltons so as to obtain a retained fraction and a permeate fraction, and
- (e) recovering the permeate fraction.

Compl. Specn. 15 pages.

Drgs. Nil.

Ind. Cl. : 92 E Gr [I (3)]  
94 C and G Gr [XXXIII (4)]

171815

Int. Cl. : B 02 C—7/18, 7/16, 7/14, 7/06.

Applicant & Inventor: MADHAV VISHWANATH DEODHAR 436/6, DEODHAR WADA, NEAR RAJWADA, ICHALAKANJI-416 115 MAHARASHTRA, STATE INDIA A SUBJECT OF THE REPUBLIC OF INDIA

#### AN IMPROVED FLOUR MILL

Application No. 194/Bom/1990 Filed on 31st July 1990.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

#### 1 CLAIM

An improved flour mill comprising a low height cabinet on the bottom of which there is provided a strong hinged foundation plate with bolts for adjusting tension of v-belts running over a pulley of the prime mover; such as a 5 HP electric motor, mounted on the said foundation plate, the said V-belts, in turn, rotating a set of pulleys mounted on the main shaft of the grinding device consisting of a rotating grinding stone, a stationary grinding stone and a hopper, the main shaft being provided with a pair of ball bearings on either sides of both the grinding stones and a third ball bearing being provided on the main shaft portion projecting out of the grinding device, the said projected portion of the main shaft being provided with splines and three fixed keys being provided inside the bore of the said set of pulleys driving the said main shaft.

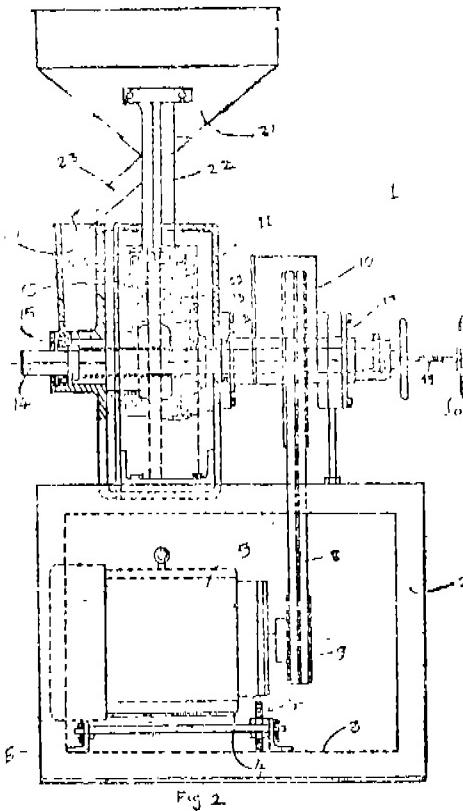


Fig. 2

Complete specification - 4 pages; Drawings - 2 sheets.

Ind. Cl. : 189 LXVI (9)]

171816

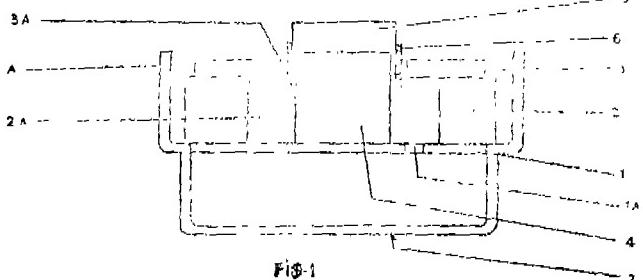
Int. Cl. : A 61 K 7/11.

#### A METHOD OF MAKING A HAIR TREATMENT COMPOSITION.

Applicants : HINDUSTAN LEVER LTD. 165/166, BACKBAY RECLAMATION BOMBAY-400 020, MAHARASHTRA INDIA.



the hole in said permanent magnet through at least one orifice formed in said bottom plate.



Complete specification 6 pages.

Drawing 1 sheet.

Ind. Cl . 32 F 3 (a) Gr. [IX(1)] 171820

Int. Cl. : C 07 C - 67/00, 67/08

#### A PROCESS FOR THE ESTERIFICATION OF CARBOXYLIC ACID.

Applicant : HINDUSTAN LEVER LIMITED OF HINDUSTAN LEVER LIMITED 165/166, BACKBAY RECLAMATION BOMBAY-400 020, MAHARASHTRA INDIA, A COMPANY INCORPORATED UNDER THE INDIAN COMPANIES ACT, 1913.

Inventors : 1. HENDRIKUS JACOBUS VAN DEN BERG 2. ROBBERT KLOK,

Application No. 334/Bom/1990 filed on 14th December, 1990, U. K. Priority dated 19-11-1990.

Appropriate office for opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Bombay Branch.

#### 11 Claims

A process for the esterification of a carboxylic acid such as herein described with an alcohol such as herein described at an elevated temperature and pressure in the absence of a catalyst, characterised in that the reaction takes place in a reactor by continuously feeding one reactant in the gaseous phase and the other reactant in the liquid phase to the reactor and continuously removing therefrom a gaseous mixture comprising the more volatile reactant and water.

Complete specification - 11 pages Drawings - Nil.

PATENT SEALED ON 16-01-93

168332 168977\* 169488 169596\* 169614 169637 169697  
169700 169712 169713 169714 169736 169745 169824  
169825\* 169830\*D 169838\*D

Cal-12, Del-01, Mas-01 & Bom-03

\*Patent shall be deemed to be endorsed with the words "LICENCE OF RIGHT" Under Section 87 of the Patents Act, 1970 from the date of expiration of three years from the date of sealing

#### PRINTED SPECIFICATION PUBLISHED

A limited number of printed copies of the undernoted specification are available for sale from the patent office, Calcutta, and its branches at Bombay, Madras, and Delhi at two rupees per copy :—

160212 160213 160214 160215 160216 160217 160218  
160219 16020 160221 160222 160223 160224 160225  
160226 160227 160228 160229 160230 160231 160232  
160233 160234 160235 160236 160237 160238 160239  
160240 160241 160242 160243 160244 160245 160246

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160268	160269	160270	160271	160272	160273	160274
160275	160276	160277	160278	160279	160280	160281
160282	160283	160284	160285	160286	160287	160288
160289	160290	160291	160292	160293	160294	160295
160296	160297	160298	160299	160300	160301	160302
160303	160304	160305	160306	160307	160308	160309
160310	160311	160312	160313	160314	160315	160316
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160324	160325	160326	160327	160328	160329	160330
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160338	160339	160340	160341	160342	160343	160344
160345	160346	160347	160348	160349	160350	

#### REGISTRATION OF ASSIGNMENTS LICENCES ETC. (PATENTS)

Assignments, licences or other transaction affecting the interests of the original Patents have been registered in the following cases.

153924 SONEX RESEARCH, INC.

Assignments, licences or other transaction affecting the interests of the original patents have been registered in the following case.

156855 M/s. Gautam Coal Works Pvt. Ltd.

#### RENEWAL FEES PAID

150864	151996	152006	152278	152873	153197	154105
154484	154977	154988	154989	155485	155486	155958
156383	156769	157408	157718	157924	158239	158303
159172	159239	159496	160079	161113	161306	161336
161516	161578	161965	162193	162970	163482	163571
163580	163791	164168	164949	164950	164991	165826
165927	168501	168902	168935	169054	169458	169536
170114	170236.					

#### CESSATION OF PATENTS

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159956	159960	159963	159965	159967	169974	159977
159978	159979	159980	159984	159986	159990	159992
159996	159997	159998	160003	160007	160008	160015
160024	160025	160026	160028	160035	160037	160039
160041	160042	160053	160057	160067	160069	160071
160073	160081	160083	160086	160087	160094	160099
160101	160106	160112	160113	160116	160121	160122
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162656	164512	166240	167059			

(ENDORSEMENT OF PATENTS WITH THE WORDS  
LICENCE OF RIGHT UNDER SECTION 87 OF THE  
PATENTS ACT, 1970.)

Patents No.	Dated
161980	20-1-1992
161817	
161858	
161940	
161766	
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162097	
162110	
161920	
161921	
162049	
161770	

Patents No.	Dated	Patents No.	Dated
161793	20-1-1992	162626	24-1-1992
161795		162699	
161812		162808	
162090		162855	
162119		162300	
162046		162578	
161822		162854	
161893		162821	
161936		162587	
161947		162870	
162047		162534	
162048		162859	
162060		162879	
162865	24-1-1992	162880	
162689		162517	
162856		162826	
162460		162846	
162625		162878	
		162567	
		162840	

## CHEM. ENGG. LIST NO. III

## COMMERCIAL WORKING OF PATENTED INVENTIONS

The Following patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of the Patents Act, 1970 in respect of calender year 1990 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patent commercially may contact the patentees for the grant of a license for the purpose.

Patent No.	Date of Patent	Name and Address of the Patentee	Title of the invention
		3	4
163940	19-12-1984	Alcan International Limited, 1188 Sher Brooke Street, West Montreal Quebec, Canada.	A method for preparing improved surface coating composition.
163941	19-12-1984	Do.	Improved surface coating compositions.
164286	10-4-1985	Do.	A method of tanning animal skins and hides.
165717	29-7-1987	Battelle Memorial Institute, 7, Route De Drize CH-1227, Carouge-Geneve, Switzerland.	A method of preparing a therapeutic compound.
151709	5-5-1982	Carborundum Universal Limited, 28, Rajaji Salai, Madras-600 001.	A method for manufacturing calcium silicon alloy.
156547	8-4-1983	Do.	A process for manufacturing refractory casseroles and refractory casseroles made thereby.
160920	31-8-1981	CIBA GEIGY AG. Klyvackstrasse 141, 4002, Basle, Switzerland.	Process for the preparation of aluminium or zinc phthalocyanine compounds.
161181	21-4-1984	Do.	Process for dyeing silk or silk containing fibre blends.
161351	11-4-1984	Do.	Process for dyeing silk or fibre blends containing silk.
161366	6-7-1984	Do.	Process for the production of benzanthrone.
159600	21-3-1984	Chuo Kagaku Co. Ltd., 5-1, 3-chome, Miyaji, Kounesu-shi, Saitama-ken, Japan.	A process for producing a resin foam by aqueous medium.
158232	27-8-1984	CPC International Inc. International Plaza, P.O. Box 8000, Englewood Cliffs, New Jersey 07632, U.S.A.	Process for making hot water dispensable corn starch having high paste viscosity.
163756	22-7-1986	Dainippon Ink and Chemicals Inc. 35-58, 3-chome, Sakashita, Itabashi-ku, Tokyo, Japan.	Method of producing deodorants.

1	2	3	4
163127	14-5-1986	David Cullis-Hill, 111 Bronte Road, Bondi Junction, NSW, South Wales, Australia.	A method of preparing high purity hyaluronic acid from synovial fluid.
165077	12-6-1987	Dr. Ing. Reinhard von Nordenskjold, Am Jagdwed 4, D-8011, Solalinden, West Germany.	A process for the biological purification of sewage and device for carrying out such a process.
159245	30-1-1984	Hoechst Aktiengesellschaft D-6230, Frankfurt am Main 80, Federal Republic of Germany.	A process for the preparation of a catalytically active electrode material for the preparation of a catalytically active electrode material for oxygen consuming electrode.
160411	23-3-1984	Do.	A Process and apparatus for making phosphorus pentoxide with utilization of reaction heat.
160622	17-4-1984	Do.	Process and apparatus for making phosphorus pentoxide with unilaziation of the reaction heat.
164553	18-3-1987	Do.	A process for the preparation of 2-acetylaminogentisic acid.
164557	18-3-1987	Do.	A process for the preparation of novel pharmacologically active compound.
165815	26-11-1985	Homestake Mining Co., 650, California Street, San Francisco, California 94108, U.S.A.	A process for recovering gold from an aqueous slurry formed from a refractory ore.
160895	10-5-1984	Hylsa S.A., A. Mexican Corporation, Apdo, Postal 996, Monterrey, N.L. Mexico.	A process for reducing paticulate iron ore to sponge iron.
160498	9-3-1984	Kerr McGee Chemical Corporation, Kerr McGee Center, Oklahoma City, Oklahoma, U.S.A.	Process for producing tetrachloride from natural or synthetic titanium ore, carbonaceous reductant and chloride.
160499	9-3-1984	Do.	Process for production of titanium dioxide from titaniterrows ores.
162230	20-9-1984	Do.	A process for producing manganese sulfate solution from manganese ores containing potassium impurity.
162339	20-9-1984	Do.	Preparation of manganese sulphate solution with very low concentration.
162986	9-11-1984	Kerr McGee Chemical Corp. Kerr McGee Center, Oklahoma City, Oklahoma 73125, U.S.A.	An improved method of preparing electrolytic manganese dioxide.
147264	9-3-1978	Kontiki Chemicals and Pharmaceuticals Pvt. Ltd., A.K. Office, Building Baliapatam, Cannanore 670010, Kerala, India.	Process fo the preparation of collder ivatives.
147307	8-1-1979	Do.	Process for preparing devivatives from coffee husles.
147418	9-3-1978	Do.	Process for preparing an improved adhesive substance.
147937	24-1-1979	Do.	Process for the production of cellulose.
154070	4-6-1982	Do.	Production for the production of heavy metal in adsorbent.
154863	20-1-1981	Kontiki Chemicals & Pharmaceuticals Pvt. Ltd., A.K. Office Building, Baliapatam, Cannanore-670010, Kerala, India.	Improvements in or relating to aminoplastic synthetic resin adhesives.
158416	12-10-1984	Do.	Process for the preparation of a colouring matter from coconut shell.

1	2	3	4
161432	14-6-1984	Mitsui Toatsu Chemicals Inc. 2-5, 3-Chome, Kasumigaseki, Chiyoda-ku, Tokyo, Japan.	Process for producing dianthraquinone-N, N'-dihydrazine.
165075	2-6-1987	Do.	Process for producing cyclic ureas.
158230	10-8-1984	Monsanto Company, 800 North Lindbergh, Boulevard, St. Louis, Missouri 63166, U.S.A.	Process for preparing substituted 2, 6-substituted pyridine compounds.
160125	10-8 1984	Monsanto Company 800 North Lindbergh Bonlevard, St. Louis Missouri 63167, U.S.A.	A process for preparing substituted dihydro-pyridine isomers.
163601	30-11-1984	Do.	Method of producing nitro diaryl-lamine.
160307	17-3-1984	M.W. Kedlogg Company, Three Greenway Plaza, Houston, Texas 77046-0395, U.S.A.	Improved catalysts for use in ammoni production.
162060	23-5-1985	Nippon Chamiphar Co. Ltd., 2-2-3, Iwamoto-cho, Chiyoda-ku, Tokyo, Japan.	A process for the preparation of 1, 3-oxazolidine-2-one.
162767	17-9-1985	Do.	A process for the preparation of amino-alcohol derivatives.
163044	22)8-1 89	Do.	Process for preparation of novel quinaldiamide derivatives.
164200	30-1-1987	Do.	Process for the preparation of novel alkylenedianine derivatives.
165719	23-5-1983	Do.	A process for the preparation of 1-3-oxazolidine-2-one derivative.
165787	23-5-1985	Do.	A process for the preparation of 1, 3-oxazolidine-2-one derivative.
162232	15-5-1982	Nitto Chemical Industry Co. Ltd., No. 5-1 Marunouchi, 1-chome, Chiyoda-ku, Tokyo, Japan.	Process for improving activity of telurium containing metal oxide catalysts.
162985	9-10-1984	Norman Louis Weinberg 95 Chasewood Lane, East Amherst, New York-14051, U.S.A.	Improved method for the electrosynthesis of ethylene glycol.
162045	16-7-1985	Seikenkai Foundational Juridical Person, No. 95, Fushimide-cho, Tondabayashi-shi, Osaka, Japan.	A process for preparing a biodeodorizer.
160912	25-4-1984	Shell Internationale Research Maatschappij B V. Carel Van Bylandtlaan, 30, The Hague, The Netherlands.	A process for the preparation of a catalyst suitable for the conversion of carbon monoxide and hydrogen into hydro carbons.
163547	27-12-1984	Do.	A process for preparation of an activated catalyst.
164143	8-2-1985	Do.	Process for the preparation of hydrocarbons by catalytic reaction of carbon monoxide with hydrogen.
164153	8-2-1985	Do.	Process for the preparation of hydrocarbons.
164406	27-3-1985	Do.	A process for the preparation of high viscosity index lubricating oil.
164493	27-3-1985	Do.	Process for the preparation of linear C <sub>10</sub> -C <sub>20</sub> olefins.
165116	3-7-1985	Do.	A process for the preparation of activated catalyst.
165306	7-8-1985	Do.	A process for obtaining a sweet gaseous stream free of hydrogen sulphide.
165407	16-7-1985	Do.	A process for producing synthesis gas of increased H <sub>2</sub> /CO <sub>2</sub> ratio.

1	2	3	4
165776	20-8-1985	Shell Internationale Research Maatschappij B.P. Carel Van Bylandtlaan, 30, The Hague, The Netherlands.	Process for preparation of hydrocarbons by catalytic reaction of carbon monoxide and hydrogen.
165968	8-10-1985	Do.	Process for the production of synthesis gas with an increased H <sub>2</sub> /Co. ratio.
159598	22-7-1981	Stamicarbon B.V. P.O. Box 10, 6160 MC Geleen, the Netherlands.	Process for the preparation of copolymers of ethylene with at least one ether 1-alkene.
161655	24-7-1984	Do.	A process for the preparation of an impact resistant polymer composition.
162564	14-11-1984	Do.	Process for preparing a purified rubber.
163848	5-12-1984	Do.	Process for preparing polyacrylonitrile artic- es having high tensil strength and modulus.
164794	1-5-1985	Do.	Process for the preparation of polytetra- methylene adipamide.
166239	28-11-1985	Do.	Process for the preparation of a thermally stabilize polyamide composition.
166265	28-11-1985	Do.	Polymide resin compositions containing polyarylene sulfides.
166525	28-11-1985	Do.	Polymido resin composition containing sili- con oils.
162048	29-8-1985	Teikoku Hormone Mfg. Co. Ltd., 5-1, 2-chome, Akasake, Minato-ku, Tokyo, Japan.	A process for the production of 2-(3, 5-diakyl- 4-hydroxy phenyl) indole derivative.
162439	10-10-1985	Do.	Process for producing diphenylmethyliamine derivatives.
162700	7-3-1986	Do.	A process for the preparation of 2-oxa-or- aza-pregnane compounds.
163755	15-7-1986	Do.	Process for producing N-II-piperidinylmethyl- phenoxy (propyl) acetoxyacetamide hydro- chloride.
165718	8-9-1987	Do.	A process for producing pyridazenoine derivatives.
146818	17-3-1978	The Indian Space Research Organisation, Department of space, F. Block, Canvery Bhavan, Bangalore-56009, Karnataka.	Process for the production of polyols con- taining basis nitrogen.
149126	21-2-1980	The Indian Spaco Research Organisation,	An improved process for producing polyols.
149900	11-7-1980	Do.	A process for the production of polyhydro- xyester resins.
153437	18-9-1987	Do.	A process for production of fire retardant rigid polyurethane foam.
165240	27-10-1986	Do.	An improved process for preparing metal coated dielectric substrates and metal coated substrates thereof.
162234	27-8-1984	Unie Van Kunststof fabricken, B.V. P.O. Box 43, 3500 AA, Utrecht, the Netherlands.	Process for the preparation of granules.
162235	27-8-1984	Do.	Process for the preparation of granules
164392	7-3-1985	Do.	Process for the preparation of urea.

1	2	3	4
160137	28-3-1984	Union Carbide Corp., 270 Park Avenue, New York, State of New York, 10017, USA.	A continuous process for the preparation of low density low Modula ethylene copolymers in a fluidized bed.
160793	23-12-1981	Do.	Process for preparing a treated precursor composition suitable as a component of a catalyst composition capable of producing high density ethylene monopolymers and copolymers under a pressure of less than 1000 PSI with low accompanying ethylene hydrogenation.
160918	10-7-1984	Do.	An olefin polymerization catalyst and pro- cess for preparing the catalyst.
161446	27-6-1984	Do.	An improved process and apparatus for extruding with a reduced surface melt fracture a molten narrow molecular weight distribu- tion linear ethylene polymer.
163427	28-12-1984	Do.	A process for the selective production of mixture of linear primary alcohols having 1 to 5 carbon atoms.
163428	28-12-1984	Do.	A process for producing C <sub>n</sub> +1 alcohols.
163936	29-3-1985	Do.	A liquid recycle rhodium catalysed hydro- formylation process for producing aldehydes.

## ELECT. ENG. LIST NO. III

## COMMERCIAL WORKING OF PATENTED INVENTIONS

The following patents in the field of Electrical Engineering industry are not being commercially worked in India as admitted by patentees in the statements filed by them under section 146(2) of the Patents Act, 1970 in respect of calendar year 1990 generally on account of want of request for licences to work the patented invention, persons who are interested to work the said patents commercially may contact the patentees for the grant of a license for the purpose.

Patent No.	Date of Patent	Name & Address of Patentee	Title of the Invention
1	2	3	4
149716	2-8-1979	Brakes India Limited, A Company registered under the companies Act having its office at Padi, Madras- 600 050.	An electric switch for direct current circuits.
165780	28-8-1985	Charbonnages De France, 9 Avenue Percier, 75008, Paris, France.	A power circuit.
162562	18-9-1984	Cogent Limited, Temple court, 11 Queen Victoria Street, London EC4N 4TP, England.	Electrochemical cell.
165593	23-9-1985	Festo KG, Ruiter Str. 82, 7300 Esslingen, Federal Republic of Germany.	A circuit assembly for use in electrical pneu- matic controllers.
163854	23-1-1985	FMC Corporation, 200 East Randolph, Drive, Chicago, Illinois-60601, USA.	Synchronous/asynchronous communication system.
163981	23-1-1985	Do.	A data communications bus serving a plura- lity of user data source and sinks.
163784	15-1-1985	Hoechst Aktiengesellschaft, D-6230, Frankfurt am Main 80, Federal Republic of Germany.	An electrolytic cell for carrying out a liquid electrolysis process.
163785	15-1-1985	Do.	An electrolytic cell for carrying out a liquid electrolysis process.
163786	15-1-1985	Do.	An electrolytic cell for carrying out a liquid electrolysis process.
164829	27-5-1985	Do.	Bipolar electrolysis apparatus with gas diffu- sion cathode.
164954	8-7-1985	Do.	A trough like electrolysis cell with horizon- tally disposed electrodes.

1	2	3	4
164640	17-4-1985	Jaumont-Schneider, 31-32, Quai, de Dion Bouton, 92811, Putceaux Cedex, France.	An oscillating circuit for a detector.
159772	16-6-1984	Kerala State Electronics Development Corporation Ltd., Keltron House, Vellayambalam, Trivandrum.	A magnedyne encoder.
163368	23-2-1985	Do.	An inductive card reader.
160310	10-4-1984	Mitsubishi Denki Kabushiki Kaisha, 2-3 Marunouchi-2-chome, Chiyoda-ku, Tokyo, Japan	Static type switch disconnect circuit for tripping of circuit breaker in power lines.
162394	6-9-1984	Do.	A control apparatus for an AC elevator.
159220	30-1-1984	Permelec Electrode Ltd., No. 1159 Ishikawa, Fujisawashi, Kanagawaken, Japan.	Electrode for electrolysis and process for production thereof.
162333	1-9-1984	Rosemount Incorporated 12001, West 76th Street, Eden Prairie, Minnesota 55344, USA.	A transducer for converting electric signal to pneumatic signal.
162397	18-10-1984	Sumito Electric Industries Ltd., No. 15, Kitahama 5-chome Higashi-ku, Osaka-shi, Osaka, Japan.	Composite overhead standard conductor.
163604	27-12-1984	Union Carbide Corp. 270 Park Avenue, New York, State of New York 10017, U.S.A.	An electrical induction apparatus.

## MECH. &amp; GEN. LIST NO. III

## COMMERCIAL WORKING OF PATENTED INVENTIONS

The following Patents in the field of mechanical & General Engineering Industry are not being commercially worked in India as admitted by Patentees in the statements filed by them under section 146(2) of the Patents Act, 1970 in respect of Calendar Year 1990 generally on account of want of request for licences to work the Patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a license for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the invention
1	2	3	4
160710	5-5-1984	Alcan International Limited, 1188 Sher Brooke Street, West Montreal, Quebec, Canada.	Structures fabricated from Aluminium components and process involved in making these structures.
165783	19-9-1985	Alexander I. Kalina 12214 Clearfork Drive Houston, Texas 77077, U.S.A.	Apparatus for generating energy using multi-component working fluid.
162135	20-7-1984	Arthur Ernest Bishop 17, Burton Street, New South Wales, Commonwealth of Australia.	A machine for cutting the teeth of a rock.
149541	30-1-1980	Ashok Leyland Ltd. 19, Rajaj Salai, Madras-600001, Tamil Nadu.	A pneumatic throttle retarder linkage assembly of overspeed limiting device meant for motor Vehicle.
158289	7-4-1983	Do.	An improved marine screw propeller.
164621	28-2-1985	Atlas Air Australia Pty. Limited, Atlas Air House, 27, Bridge Street, Pymble, New South Wales, Australia 2073.	A humidifier.
166025	13-11-1985	Avon Industrial Polymers Ltd., Bath Road, Melksham, Wiltshire SN 12 8AA, England	A respirator.

1	2	3	4
148580	28-9-1978	Brakes India Limited, A company registered under the Companies Act, having its office at Padi, Madras-600050.	A brake fluid reservoir of a hydraulic braking system.
148974	28-9-1979	Do.	A self-operative device for adjusting the brake lining with respect to the brake drum of a braking system.
149236	16-6-1980	Do.	An improved cam brake.
149241	5-4-1980	Do.	A pedal mechanism for a hydraulic brake system.
153829	25-10-1982	Do.	'S' Cam Brake.
156335	19-10-1982	Do.	A dust cover for wheel cylinders of vehicle hydraulic brake.
163291	2-11-1984	Charbonnages De France a Avenue Percier, 75008, Paris, France.	A direct view remote control apparatus for remote control of machine.
165262	24-6-1985	Do.	A device for transferring on a frequency carrier signals relative to an electric machine.
161449	3-7-1984	Contraves Italiana S.P.A. of Italian Nationality Via. Affile 102-00131, Rome, Italy.	Reflector antenna.
162727	21-9-1984	Davidson & Co. Ltd., Sirocco Engineering Works, Bridge end, Belfast B 75 4 G, Northern Ireland.	A rotary regenerative air preheater having means for sealing between relatively rotatable parts.
163315	19-3-1985	Dengensha Manufacturing Company Limited, 23-1, Masugata, 1-chome, Tama-ku, Kawasaki-shi, Kanagawa, Japan.	A control device for controlling constant current in resistance welding machine.
166137	28-10-1985	DRG(UK) LTD., 1 Redcliffe street, Bristol B 599 7QY, United Kingdom.	Printing roll with detachable sleeve.
154718	5-9-1981	Dr. Jose Thaikattil, Physician, University Health Centre, Calicut University P. O. Kerala State.	Comb.
160123	18-7-1984	Dr. Werner Freyberg Chemische Fabrik Deliba Nacht, pt. 6941 Laudenbach, Federal Republic of Germany.	An applicator for use in pest control.
165595	18-7-1984	Dr. Werner Freyberg, Chemische Fabrik Deliba Nacht.	A method of making an applicator in the form of a sachet suitable for containing a gas evolving pest control agent.
162722	15-5-1981	Energy Conversion Devices Inc. 1675 West Maple Road, Troy, Michigan 48081, U.S.A.	Apparatus for making a photovoltaic panel from a roll of a web of a flexible substrate material.
161954	18-7-1984	Eskla B.V. P.O. Box 7811, 1008AA Amsterdam, The Netherlands.	Apparatus for carrying out physical and/or chemical processes more specifically a heat exchanger of the continuous type.
165095	11-6-1985	Flo-con Systems Inc. Champaign, Illinois, U.S.A.	A refractory plate for use with a sliding gate valve.
165161	11-6-1985	Flo-Con Systems Inc. Champaign, Illinois, U.S.A.	Refractory replaceable member for a sliding gate valve.
167085	29-1-1986	FMC Corporation, 200 East Randolphdrive, Chicago, Illinois 60601, U.S.A.	Container translating & orienting apparatus
160591	31-3-1984	Granulite-Limited, Millbank House, Corporation Street, Rugby CV21 2DW, England.	A process for the manufacture of building materials.

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164636	11-4-1985	Cranulite Limited, Millbuck House, Corporation Street, Rugby CV 21 2DW, England.	A building material composition in granular form.
164154	8-2-1985	Habley Medical Technology Incorporated, 23181, Verdugo Drive, Unit 105-B, Laguna Hills, California 92653, U.S.A.	A sphincter suitable for implantation so as to embrace a patient's urethra for occluding & opening the urethra and controlling the passage of urine therethrough.
162762	27-9-1984	Hochiki Kabushiki Kaisha, 10-43, Kamiesaki, 2-chome, Shinagawa-ku, Tokyo, Japan.	Scattered light type smoke detector.
158724	13-3-1984	Hoechst Aktiengesellschaft, D-6230, Frankfurt am Main 80, Federal Republic of Germany.	Apparatus for making red phosphorus.
163014	26-11-1984	Honda Giken Kogyo Kaisha No. 27-8, 6-Chome, Jingumae, Shibuya-ku, Tokyo, Japan.	Replaceable gang head machine tool.
164461	15-4-1985	Honda Giken Kogyo, Kabushiki Kaisha, 27-8, 6-Chome, Jingumae, Shibuya-ku, Tokyo, Japan.	A metal sintered body and method of manufacturing the same.
164147	14-2-1985	Indag Gesellschaft Fur, Industriebedarfmbh, Rudolf-Wild-Strasse 4, 6900 Heidelberg Eppelheim, Federal Republic of Germany.	Pressure-resistant beverage container.
150973	25-8-1984	India Pistons Limited, Huzur Gardens, Sembam, Madras-600 001 Tamil Nadu, India	A method of manufacturing compression rings and compression rings manufactured thereof.
160246	5-4-1984	I.S.C. Smelting Limited, 6, James's Square, London SW1Y 4 LD, England.	An apparatus for dispersion of liquid in gases.
163631	28-3-1984	J & D Oram Limited 243 Heath Road, Leighton Buzzard, Bedfordshire, England.	An adjustable lamp assembly.
164407	28-3-1985	Kemira Oy, Malminkatu 30, SF-00400 Helsinki 10, Finland.	Apparatus for manufacturing a concentrated distillate by the vaporization and distillation of a liquid reaction mixture.
149394	8-2-1980	Lucas Industries Public Limited Company, Great King Street, Birmingham 19, England.	A vehicle disc brake assembly.
149638	11-12-1978	Do.	A railway disc brake assembly.
149798	29-10-1979	Do.	Brake actuating assembly for a vehicle braking system.
149834	19-9-1978	Do.	A disc brake assembly.
150269	23-2-1981	Do.	A pin sliding caliper-disc brakes.
150461	8-2-1980	Do.	A friction lining wear indicator for shoe drum brake.
150531	19-3-1979	Do.	Improvements in disc brakes for railway vehicles.
150635	9-1-1980	Do.	Vehicle load sensing arrangement.
150636	5-3-1980	Do.	Drum brake adjuster.
150673	7-7-1980	Do.	A piston assembly for hydraulic master cylinder.
150779	21-5-1980	Do.	Automatically adjustable shoe drum brake.
155601	15-10-1981	Do.	Vehicle drum brakes.
155604	4-12-1981	Do.	Automatic adjuster for a shoe drum brake and shoe drum brake incorporating the same.

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151352	21-5-1980	Lucas Industries, Public Limited Company Great King Street, Birmingham 19, England.	A brake having an automatic adjuster.
151873	7-4-1981	Do.	Master cylinder.
152181	23-2-1981	Do.	A servoboosters for vehicle braking systems.
153873	5-8-1981	Do.	Master cylinder.
154071	22-12-1981	Do.	Friction pad assembly for use in a disc brake.
156336	20-4-1983	Do.	A disc for a vehicle disc brake.
156719	20-11-1982	Do.	Actuator for shoe-drum brake and a shoe-drum brake incorporating such actuator.
157182	11-1-1983	Do.	Internal shoe-drum brake.
157186	20-4-1983	Do.	A disc for a vehicle disc brake.
159774	23-12-1983	Do.	Sliding caliper disc brake with pad support.
160633	30-3-1984	Do.	Master cylinder for vehicle braking systems.
161356	5-6-1984	Do.	Improvement in vehicle disc brakes of the liquid cooled type.
162334	4-9-1984	Do.	Actuator assemblies for vehicle brakes.
163139	29-11-1984	Do.	Brake pressure control system.
163140	29-11-1984	Do.	Internal shoe drum brake.
163344	21-11-1984	Do.	A hydraulic fluid pressure supplying master cylinder incorporating an internal reservoir.
163539	7-2-1985	Do.	Brake actuator.
163943	19-1-1985	Do.	A spot type disc brake.
164828	27-5-1985	Do.	Improvement in liquid level indicators for vehicle hydraulic systems.
165635	6-9-1985	Masataro Sato 191, Banchi, Ooaza Ikenoba, Miki-Cho, Kita-gun, Kagawa-ken, Japan.	Brake system for cycles.
160917	27-6-1984	Minnesota Mining & Manufacturing Company 3M Center, Saint Paul, Minnesota 55144, U.S.A.	A stapler for use with generally U-shaped staples.
163853	51-12-1984	Do.	Directionally imaged shooting.
165712	14-2-1986	Do.	A cartridge for use in a stapler for driving generally U-shaped staples.
158723	17-2-1984	Mitsuboshi Belting Ltd., 1-21, Hamazoe-dori 4-chome, Nagata-ku, Kobe shi, Hyogo, Japan.	Power transmitting V. Belt.
159224	17-2-1984	Do.	Power transmitting V. Belt.
159226	18-2-1984	Do.	Method for manufacturing elongated cogged V. Belt.
159640	18-2-1984	Do.	Toothed rubber belt.
165596	4-11-1985	Do.	Spring-loaded variable speed pulley.
163669	23-7-1985	Do.	A power transmission belt.

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159249	31-1-1984	Mitsubishi Denki Kabushiki Kaisha, 2-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, Japan.	Static induction apparatus.
160306	13-3-1984	Do.	Elevator driving apparatus.
160496	6-3-1984	Do.	Heat exchanging device with heat exchanging plates.
160795	23-8-1984	Do.	Control apparatus for hoisting drum elevator.
163154	14-4-1982	Do.	Drawer-type circuit breaker with improved latch means.
166392	29-7-1982	Do.	A batch inserting test plug for a drawer type relay.
161448	3-7-1984	Monsanto Company 800 North Lindbergh Boulevard, St. Louis Missouri-63167, U.S.A	An apparatus for the recovery of head from a sulfuric acid plant.
163370	23-3-1985	M. V. Sreenivasa Raju, F-11 & F-14, Manish Complex, 10, Convent Rd., Bangalore-25.	A device to guide & or channelise the water on the surface of water reservoir in a predetermined route(s) Length(s) for cooling the same.
157209	22-10-1982	Nambanudi Sinniah, Velasithan Sinniah Velanipaitty, Kattampur Post, Ramnad District, Tamil Nadu, India.	An improved reduction gear arrangement.
165408	17-7-1985	Nippon Koken Kabushiki Kaisha, 2, 1-chome, Marunouchi, Chiyoda-ku, Tokyo, Japan.	Apparatus for removing impurities contained in molten pig-iron tapped from blast furnace.
163364	29-12-1984	Nissin Kogyo Kabushiki Kaisha, 840, Banchi, Coaza Kobubu, Vedashi, Nagano-ken, Japan.	An improved drum brake apparatus for vehicle.
160599	9-4-1984	Nitto Boseki Co. Ltd., No. 1 Aza Higashi, Gonome, Fukushima-shi, Fukushima, Japan	A method of producing fiber forming bushing.
160914	29-3-1984	Do.	A centrifugal force system glass fiber producing apparatus.
164289	29-4-1985	Owens-Illinois Closure Inc. One Sea Gate, Toledo, Ohio 43666, U.S.A.	Tamper indicating child-resistant package.
165876	23-8-1985	Owens Illinois Closure Inc.	A closure for a finish of a container having a neck ring.
164391	5-3-1985	Do.	Blow molding apparatus.
165481	29-7-1985	Do.	Multilayer plastic structure.
162053	26-7-1984	Patitex Project-Company GmbH, Weeserweg 60, 4150 Krefeld 1, Federal Republic of Germany.	Two-for-one twisting spindle.
163367	15-2-1985	Do.	A yarn wetting device.
163506	26-12-1984	Do.	A device for varying the tractive force and tension on a running thread.
165549	24-7-1985	Research & Development Pty. Ltd., Suit 703, A.M.P. Building 50 Miller Street, North Sydney, N.S.W. 2060, Australia.	Improvements in centrifugal grinding mills.
165267	23-7-1985	Rosemount Incorporated, 12001 West 76th Street, Eden Prairie, Minnesota 55344, U.S.A	A batch fabricated thin film platinum resistance thermometer.
162971	19-11-1984	Sanden Corporation 20 Kotobuki-cho Isesaki-shi Gunma-ken, Japan.	A scroll type fluid displacement apparatus.
162983	22-11-1984	Do.	Scroll type fluid displacement apparatus with anti-wear scroll drive.
162988	22-11-1984	Do.	Scroll type fluid displacement apparatus with improved drive shaft supporting mechanism.
163148	14-11-1984	Do.	Scroll type compressor with displacement adjusting mech sm.

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163156	26-12-1984	Sanden Corporation, 20 Kotobuki-cho, Ise-saki-shi, Gunma-ken, Japan.	A refrigerant compressor with mechanism for adjusting the capacity thereof.
163342	14-11-1984	Do.	Scroll type fluid displacement apparatus including a pair of scrolls.
164141	21-11-1984	Sanden Corporation,	Scroll type fluid displacement apparatus with varying scroll thickness.
164156	18-2-1985	Do.	A wobble plate type refrigerant compressor.
164245	18-2-1985	Do.	Wobble plate type compressor with a capacity adjusting mechanism.
161367	13-11-1984	Schubert & Salzer Maschinenfabrik AG, Friedrich Ebert, Strasse, 84, 8070, Ingolstadt, W. Germany.	Support disc bearing.
163931	6-2-1985	Do.	Open-end rotor spinning apparatus.
165137	7-6-1985	Schubert & Salzer Maschinenfabrik Aktion-geellschaft.	A method and an apparatus for preparing a thread end for restarting an open and spinning apparatus.
165781	30-8-1985	Sealey Building system Pty., 7th Floor, First Federal Building 33, Barrack Street, Perth, Western Australia.	A method of constructing a building and a building so constructed.
164126	11-2-1985	Shaw Industries Ltd., 25 Bethridge Road, Rexdale, Ontario, Canada M 9W 1M 7.	A metal pipe having a protective coating and a method of making the same.
159804	10-2-1984	Shell Internationale Research Maatschappij B. V. a Netherlands, Company, of Carol Van Byland Haan 30, The Hague, Holland.	Apparatus for transporting particulate material.
160595	5-4-1985	Do.	Apparatus for separating mixtures of liquid and gas.
164284	14-3-1985	Do.	Apparatus for the gasification of the pulverized solid fuel.
165138	13-6-1985	Sobrevin Societe De Brevets Industries Etablissement altenbach 1, FL-9490, Vaduz, Liechtenstein.	Thread, storage and feed device.
165816	29-11-1985	Sobrevin Societe De Brevets Industriels, Etablissement.	A device for delivering continuous threads.
165614	12-6-1985	Stork Screens B.V. 3, Raamstraat, 5831 at Boxmeer, The Netherlands.	A screen for printing and a method for manufacturing the same.
160897	18-5-1984	Sumitomo Electric Industries Ltd., No. 15, Kitahama 5-chome, Higashi-ku, Osaka, Shi, Osaka, Japan.	A drill bit.
161687	6-9-1984	Do.	Apparatus for gasifying carbonaceous materials.
160372	23-5-1984	Surya Gars Jawans's Bhavan 27 Traveller's Bungalow Rd, Coimbatore 641018, India.	A single motor multispeed drive for ring frames.
153872	25-9-1981	The Indian Space Research Organisation, F-Block, Cavery Bhavan, District Office Road, Bangalore, Karnataka.	A method and a machine for continuously producing fibre reinforce plastics structural sections of uniform cross sections.
163017	14-8-1985	The Indian Space Research Organisation, F-Block, Cavery Bhavan, District Office Road, Bangalore, Karnataka.	An electro-optical instrument to measure agronomical parameters.
160341	10-4-1985	T. K. Pr. Mukumar, Thuruthiparambil, E.R.G. Road, Cochin-682031, Kerala.	Energy converter.

1	2	3	4
148456	31-7-1978	Tube Investments of India Limited, TIAM HOUSE, 28, Rajaji Road, Madras-600001.	A metallic lightmeight structural member.
148573	6-1-1979	Do.	A weighing device.
149616	19-7-1979	Do.	A pump for being driven by a bicycle.
156230	12-2-1982	Do.	An adjustable handle bar for a bicycle.
156708	27-5-1982	Do.	A shock absorber for the front wheel of a bicycle.
158018	18-1-1983	Do.	A seat shock absorber for a two wheeled vehicle.
162238	12-11-1984	Uhde GmbH, Friedrich-Uhade-Str. 15, 4600 Dortmund 1, Federal Republic of Germany.	Device for performing exothermal catalytic gas reacting for the ammonia or methonal synthesis.
164622	16-3-1985	Do.	Device for achieving a uniform distribution of the gas flowing radially through a catalyst bed.
164492	26-3-1985	Unisearch Limited, 221, Anzac parade, Kensington, NSW 2033, Australia.	A solar Cell and method of manufacturing the same.
163545	19-12-1984	Unistrut International Corp., 777 East Eisenhower Parbaway, Suite 600, An Arbor, Michigan 48108, U.S.A.	A fastener for affixing parts to a channeled structural member.
164500	7-5-1985	UPONOR AB, PO BOX 1, S-513 00 Fristad, Sweden.	Sludge and exrement container.
163937	29-7-1985	Varghese Philip P. O. Box 3731, Dubai, U.A.E.	A canopy assembly for mounting on the roof of vehicle such as motor car.
164466	31-5-1985	Worldwide Solar Group (Australia) Pty. Ltd., 84 Norma Road, Myaree, Western Australia.	Sollar collector.

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries is the date of the registration of the design included in the entry :

**Class 1.** Nos. 164364 to 164378. Polar Fan Industries Ltd. of Poddar Point, 113, Park Street, 8th floor, Calcutta-700016, W.B., India. "Ceiling Fan". May 13, 1992.

**Class 1.** No. 164294. Ram Mehta and Vikram Mehta of M-7, Gali No. 2, Anand Parbat Industrial Area, New Delhi-110005, India Trading as Venus Technicians. "Carbonator". April 28, 1992.

**Class 1.** No. 164390. Dey's Medical Stores Ltd. of 6/2B, Nelly Sengupta Sarani, Calcutta-700087, West Bengal, India, "Bottle". May 19, 1992.

**Class 1.** Nos. 164440 & 164441. Mohd. Atique of 1177, H.H.H. Punjabi Phatak, Ballimaran, Delhi-110006, India, Indian. "Grill for air cooler". June 4, 1992.

Copyright extended for the 2nd period of years.

Nos. 158712, 158692, 158557, 163728, 163729, 157474 and 163985.—Class 1.

Nos. 158713, 158691, 159463, 159464, 159461 & 159462.—Class 3.

No. 159465.—Class 5.

Copyright extended for the 3rd period of five years.

Nos. 158713, 158691, 159461 to 159464.—Class 3.

No. 159465.—Class 5.

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